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## CLAIMS

(Previously presented) A method for detecting myocardial ischemia, the 1. method comprising:

obtaining a first signal indicative of dynamic mechanical activity of a heart; obtaining a second signal indicative of electrical activity of the heart; and detecting myocardial ischemia based on both the first signal and the second signal, and in the event a myocardial ischemia condition is detected, notifying the patient.

2.-24. (canceled)

(Previously presented) A method for detecting myocardial ischemia, the 25. method comprising:

obtaining a first signal indicative of dynamic mechanical activity of a heart; obtaining a second signal indicative of electrical activity of the heart; and detecting myocardial ischemia based on both the first signal and the second signal, further comprising determining a location of ischemic tissue based on the first signal and the second signal.

(Previously presented) A method for detecting myocardial ischemia, the 26. method comprising:

obtaining a first signal indicative of dynamic mechanical activity of a heart; obtaining a second signal indicative of electrical activity of the heart; and detecting myocardial ischemia based on both the first signal and the second signal, wherein the first signal includes a plurality of first signals, each of the first signals indicating dynamic mechanical activity of the heart along one of a plurality of axes, the method further comprising determining a location of ischemic tissue based on the plurality of first signals.

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27. (Previously presented) The method of claim 26, wherein the second signal includes a plurality of second signals, each of the second signals indicating electrical activity of the heart along one of a plurality of axes, the method further comprising determining a location of ischemic tissue based on the plurality of first

## 28.-33. (canceled)

signals and the plurality of second signals.

34. (Previously presented) A system for detecting myocardial Ischemia, the system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the processor, when myocardial ischemia is detected, notifies the patient.

## 35.-49. (canceled)

50. (Previously presented) A system for detecting myocardial ischemia, the system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the processor quantifies a degree of ischemia based on the first signal and the second signal. Applicants: Sheldon et an Serial No. 09/945,179

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(Previously presented) A system for detecting myocardial ischemia, the 51. system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the processor determines a location of ischemic tissue based on the first signal and the second signal.

(Previously presented) A system for detecting myocardial ischemia, the 52. system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the first signal includes a plurality of first signals, each of the first signals indicating dynamic mechanical activity of the heart along one of a plurality of axes, and the processor determines a location of ischemic tissue based on the plurality of first signals.

(Previously presented) The system of claim 52, wherein the second signal 53. includes a plurality of second signals, each of the second signals indicating electrical activity of the heart along one of a plurality of axes, and the processor determines a location of ischemic tissue based on the plurality of first signals and the plurality of second signals.

## 54. (cancelled)

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55. (Previously presented) A system for detecting myocardial ischemia, the system comprising:

a first sensor that generates a first signal indicative of dynamic mechanical activity of a heart;

a second sensor that obtains a second signal indicative of electrical activity of the heart; and

a processor that detects myocardial ischemia based on both the first signal and the second signal, wherein the first sensor includes a multi-axis accelerometer and the first signal includes a plurality of heart acceleration signals, each of the heart acceleration signals indicating contractile acceleration along one of a plurality of axes, the processor determining a location of ischemic tissue based on the heart acceleration signals.

Claims 56 to 67 (canceled)